

## WOMEN IN SINGAPORE: DIFFERENCES IN BODY DISSATISFACTION AND ATTITUDES TOWARDS DISORDERED EATING IN THE THREE MAIN ETHNICITIES

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Singapore is a multi-cultural society mainly composed of Chinese, Malay and Indian ethnicities. Women from different races differ in body shape and possibly dissatisfaction. The aim of this study was to investigate if ethnicity is related to disordered eating behaviour and body dissatisfaction in adult females in Singapore. Women were randomly approached at food courts and religious temples. Participants filled in a questionnaire consisting of demographic and anthropometric data and the Eating Attitudes Test (EAT-26). Participants also reported ideal weight, perceived and ideal body shapes using a photographic figure rating scale and if on a diet for weight loss/gain. This sample was composed of 539 women (mean age=27.8years, SD=10.35): 295 Chinese, 142 Malays and 102 Indians. Kruskal Wallis test assessed ethnicity differences regarding body mass index (BMI), discrepancies between perceived and ideal weight/shape, EAT-26 and subscales' scores. Chi-square test was performed between ethnicity and if on a diet for weight loss/gain. Chinese participants had the lowest BMI ( $p<0.05$ ) but there was no significant difference between Malays and Indians. In contrast with Chinese, Indians were the least satisfied with weight and shape ( $p<0.05$ ). Malay women were also not as happy with their shape as Chinese women were ( $p<0.05$ ). Chinese women scored lowest in the EAT-26 in contrast with Malays only ( $p<0.05$ ). Yet, Malays and Indians did not significantly differ between their EAT-26 scores. Findings from this study suggest Chinese participants are less involved in disordered eating behaviour compared to Malays and Indians. Possibly this was because Malay and Indian women were of a bigger built and less satisfied with weight and/or body shape than the Chinese.

## WILLINGNESS TO TRY SINGAPOREAN FOOD: A MULTI-ETHNIC COMPARISON WITHIN FOOD NEOPHOBIA LEVELS

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Singapore is a multi-cultural society, where different ethnic cuisines co-exist and intermingle. The aim of this study was to explore the willingness of Singaporeans and expatriates to consume ethnic food in relation to food neophobia levels. Recruitment involved random and snowball approaches at food courts and religious temples for similar representation of ethnicities. Participants filled a questionnaire consisting of demographics; consumption frequency of ethnic cuisines; photographs of local dishes and willingness to eat if hungry along with indicating the least appealing food and reason; and lastly the Food Neophobia Scale. This sample consisted of 465 adults, 53% females (mean age=34.6years, SD=12.4). Approximately half the sample were Chinese and Malays. The remaining participants were Indians and expatriates from Asian and Non-Asian countries. Chi-square test assessed differences in frequency of ethnic food consumption; least appealing food and reason considering neophobia levels, ethnicity and religion. Chinese participants reported a higher consumption frequency of food from varied ethnicities whilst Malays and Indians mainly restricted themselves to their own cuisine ( $p<0.05$ ). Most neophilics (low level of neophobia) were Non-Asian-expatriates followed by Chinese. Regardless of ethnicity, religion and neophobia levels, "chicken-feet-noodles" was mainly reported as the "least-appealing" food, stating reasons categorised under "dislike" followed by "disgust". About one-third of neophobics were Malays followed by Indians, who mostly were Muslim and Hindu/Sikh. Practicing Islam or Hinduism/Sikhism might implicate more dietary restrictions than the other stated religions and therefore less willingness to try other ethnic foods. Restricting food consumption to one's own ethnic cuisine could possibly create apprehension towards "foreign foods" which in turn may increase neophobia, as suggested by current findings.

## FOOD PREFERENCES IN CHILDREN WITH INSULIN-INDUCED HYPOLYCAEMIA: THE DEVELOPMENT OF A FOOD PREFERENCE TASK

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Hypoglycaemia (blood glucose  $<4.0$  mmol/l) is a potentially serious event for people with Type 1 diabetes on insulin therapy. Treatment usually entails consuming glucose immediately followed by foods high in carbohydrate content with lower fat and protein to normalize blood glucose. However, many patients who experience hypoglycaemia struggle to make appropriate food choices, which can have severe medical consequences. Dietary decisions during hypoglycaemia can be explored by studying children who are placed in a state of hypoglycaemia as part of routine growth hormone assessment for poor linear growth. A food preference task has been developed, which will run on a tablet. Participants complete 153 binary-choice comparisons that incorporate 18 commonly consumed foods that vary systematically in macronutrient content, taste (sweet/savoury), and energy-density. In each trial, participants are asked to select the food they would 'most like to eat right now' by touching the corresponding image on the screen. Participants will complete the task at baseline and 3 times after the administration of insulin. Prior to each assessment point, participants will also rate their hunger and their ideal choice of food. Separately, parents/guardians will complete a food familiarity questionnaire. We hypothesize that as blood glucose concentrations fall, preference for foods high in carbohydrate (versus high in fat/protein) will increase. Findings from this study could shed further light on the role of glucoprivation in triggering appetite, and might provide evidence for a 'carbohydrate hunger'. Together, these observations can also inform strategies for the effective management of hypoglycaemia in diabetes.

## THE WHAT AND HOW IN COMPLEMENTARY FEEDING: DESIGN OF A RANDOMIZED CONTROLLED TRIAL

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The complementary feeding period in infancy is important for introducing healthy eating patterns as food preferences are learned early in life. Exclusively starting with vegetables compared to fruits (what) has been shown to promote vegetable acceptance in infants. Responsive feeding (how), where the caregiver is responsive to the infant's feeding cues, also stimulates healthy eating behaviour. However, the effectiveness of the what and the how of complementary feeding has never been investigated simultaneously to determine their relative importance and potential synergy. This abstract describes the design of a three-year randomized controlled trial investigating the effect of repeated exposure to exclusively vegetable purees vs. a combination of fruit and vegetable purees, and/or responsive feeding on short- and long-term infants' vegetable consumption and energy intake self-regulation. In total, 240 Dutch infants aged 4-6 months are included at the start of complementary feeding. Mothers receive a 19-day complementary feeding schedule for their baby and are randomized in one of four conditions: A) Vegetable exposure, B) Responsive feeding, C) a combination of A and B, or D) control group. Mothers also receive counselling (corresponding to the group they are in) until the child is 16 months old. Effect measurements will take place after weaning, and at 12, 18, 24, and 36 months. Primary outcomes are vegetable intake, liking, and the extent of self-regulation of energy intake; secondary outcomes are child BMI, child eating behaviour (such as food fussiness) and maternal responsive feeding.